Virginia Title V Operating Permit

Until such time as this permit is reopened and revised, modified, revoked, terminated or it expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. . This permit is issued consistent with the Administrative Process Act, 9 VAC 5-80-50 through 9 VAC 5-80-300, 9 VAC 5-80-360 through 9 VAC 5-80-700 and 9 VAC 5-140-10 through 9 VAC 5-140-900 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Virginia Electric and Power Company
Facility Name:	Bellemeade Power Station
Facility Address:	1860 Commerce Road, Richmond, Virginia
DEQ Registration No:	50988
Permit Number:	PRO50988
ORIS Code:	50966
Effective Date:	November 4, 2003
Expiration Date:	November 4, 2008

Robert G. Burnley, Director
Department of Environmental Quality
Signature Date: November 4, 2003

Attachments: Table of Contents, 2 pages
Permit Conditions, 29 pages

Bellemeade Power Station
Title V Operating Permit Table of Contents

I. Facility Information

Permittee	Facility
Virginia Electric and Power Co. 5000 Dominion Boulevard Glen Allen, VA 23060	Bellemeade Power Station
Responsible Official	**Contact Person**
Mr. John W. Ely Station Director	Ms. Cathy C. Taylor Director, Electric Environmental Services
NO_X Budget Trading Program **Authorized Account Representative**	NO_X Budget Trading Program **Alternate Authorized Account Rep.**
Mr. M.G. Deacon, Jr. VP, Fossil & Hydro	Mr. John W. Ely Station Director

AFS Identification Number: 51-760-00389

NATS Facility Identification Number: 050966

Facility Description: SIC 4911 - Electric Services
NAICS 221112 - Fossil Fuel Electric Power Generation

The Bellemeade Power Station is a 240 MW natural gas and No. 2 distillate oil-fired electric power generating facility located in Richmond, Virginia. The facility utilizes two (2) 1,163.5 mmBtu/hr combined cycle ASEA Brown Boveri Type 11N combustion turbines in conjunction with two (2) 80 mmBtu/hr duct burners to generate the bulk of the electricity. Other auxiliary equipment includes a 132.1 mmBtu/hr natural gas and distillate oil-fired ABCO boiler, a 5.961 mmBtu/hr distillate oil-fired Caterpillar emergency generator, and a 50,000 gallon distillate oil storage tank. Several of these emission units are subject to provisions of 40 CFR 60 (NSPS) as listed in the following table:

Emissions Unit	Applicable NSPS Subpart
Gas Turbines (Units 1 & 2) (1,163.5 mmBtu/hr each)	40 CFR 60 Subpart GG *Standards of Performance for Stationary Gas Turbines*
Duct Burners (80 mmBtu/hr)	40 CFR 60 Subpart Dc *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*
ABCO Auxiliary Boiler (128.1 mmBtu/hr)	40 CFR 60 Subpart Db *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*
Distillate Oil Storage Tank (50,000-Gallon)	40 CFR 60 Subpart Kb *Standards of Performance for Volatile Organic Liquid Storage Tanks for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*

The facility is a Title V major source due to the potential emissions of NO_X, SO_2, and CO. This source is located in an attainment area for all criteria pollutants. The facility is permitted under a New Source Review (NSR) permit issued April 10, 2003, and a Phase II Acid Rain permit that is effective from January 1, 2003 through December 31, 2007.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Nominal Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled
Fuel Burning Equipment						
ES-1A (Gas) ES-1B (Oil)	EP-1	Unit 1 ASEA Brown Boveri Type 11N Combustion Turbine	1163.5 mmBtu/hr 1081.3 mmBtu/hr	ABB Steam Injection System & Babcock - Hitachi Dry Catalytic System	CD-1 & CD-3	NO_X
ES-2A (Gas) ES-2B (Oil)	EP-2	Unit 2 ASEA Brown Boveri Type 11N Combustion Turbine	1163.5 mmBtu/hr 1081.3 mmBtu/hr	ABB Steam Injection System & Babcock - Hitachi Dry Catalytic System	CD-2 & CD-4	NO_X
ES-3A (Gas) ES-3B (Oil)	EP-1	John Zink Co. - Unit 1 Combustion Turbine Duct Burners	80 mmBtu/hr	ABB Steam Injection System & Babcock - Hitachi Dry Catalytic System	CD-1 & CD-3	NO_X
ES-4A (Gas) ES-4B (Oil)	EP-2	John Zink Co. - Unit 2 Combustion Turbine Duct Burners	80 mmBtu/hr	ABB Steam Injection System & Babcock - Hitachi Dry Catalytic System	CD-2 & CD-4	NO_X
ES-5A (Gas) ES-5B (Oil)	EP-5	ABCO Auxiliary Boiler	132.1 mmBtu/hr 128.1 mmBtu/hr	-	-	-
ES-7	EP-7	Caterpillar Emergency Diesel Generator	890 hp/664.0 kW	-	-	-
Fuel Storage						
ES-6	EP-6	Fuel Oil Storage Tank	50,000 gallon	-	-	-

III. Fuel Burning Equipment (Unit Ref. No.'s ES-1, ES-2, ES-3, ES-4, ES-5, and ES-7)

A. Limitations

1. The two gas turbines (ES-1 and ES-2) are subject to 40 CFR, Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines. Virginia Electric and Power Company shall comply with all applicable provisions of said standards of performance. Emission standards, if different from this subpart, are covered under Condition III.A.15 and include State limits not covered by NSPS.
(9 VAC 5-50-410, Subpart GG, 9 VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 3 of the NSR permit issued April 10, 2003)

2. The two duct burners (ES-3 and ES-4) are subject to 40 CFR, Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. Virginia Electric and Power Company shall comply with all applicable provisions of said standards of performance. Emission standards, if different from this subpart, are covered under Condition III.A.15 and include State limits not covered by NSPS.
(9 VAC 5-50-410, Subpart Dc, 9 VAC 5-80-110 B, and 9 VAC 5-80-490 B)

3. The auxiliary boiler (ES-5) is subject to 40 CFR, Part 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. Virginia Electric and Power Company shall comply with all applicable provisions of said standards of performance. Emission standards, if different from this subpart, are covered under Condition III.A.18 and include State limits not covered by NSPS.
(9 VAC 5-50-410, Subpart Db, 9 VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 4 of the NSR permit issued April 10, 2003)

4. Nitrogen oxides emissions from each gas turbine/heat recovery steam generator (HRSG) duct burner set (ES-1/ES-3 & ES-2/ES-4) shall be controlled by steam injection followed by selective catalytic reduction. Nitrogen oxides emissions from the auxiliary boiler (ES-5) shall be controlled by using staged combustion and oxygen control (low excess air). The emission control system shall be provided with adequate access for inspection.
(9 VAC 5-50-260, 9 VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 6 of the NSR permit issued April 10, 2003)

5. Sulfur dioxide emissions from each gas turbine/HRSG duct burner set (ES-1/ES-3 & ES-2/ES-4) and auxiliary boiler (ES-5) shall be controlled by limiting the sulfur content of the fuel as follows:

No. 2 Distillate Oil	0.2 percent by weight maximum
Natural Gas	0.22 grains per 100 cubic foot at standard conditions, annual rolling average

(9 VAC 5-50-260, 9 VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 7 of the NSR permit issued April 10, 2003)

6. The approved fuels for the gas turbines/HRSG duct burners (ES-1/ES-3 & ES-2/ES-4) and auxiliary boiler (ES-5) are natural gas and No. 2 distillate oil (the duct burners (ES-3 & ES-4) are limited exclusively to natural gas until satisfactory opacity testing with No. 2 distillate oil has been conducted). The approved fuel for the emergency diesel generator (ES-7) is No. 2 distillate oil. A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-1180, 9 VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 8 of the NSR permit issued April 10, 2003)

7. Virginia Electric and Power Company shall provide sampling ports adequate for test methods applicable to each gas turbine/HRSG duct burner (ES-1/ES-3 & ES-2/ES-4) and auxiliary boiler (ES-5) including safe sampling platforms, safe access to platforms and utilities for sampling and testing equipment.
(9 VAC 5-50-30 F, 9 VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 10 of the NSR permit issued April 10, 2003)

8. The two gas turbines (ES-1 & ES-2) shall consume a combined total of no more than the following quantities of fuels annually, calculated as the sum of each consecutive 12 month period:
   a. Natural gas: $14{,}221 \times 10^6$ cubic feet at standard conditions maximum when used 100 percent throughout the year.
   b. The allowable quantity of natural gas consumed annually in the gas turbines (NG_{GT}) shall be reduced when No. 2 distillate oil is used, according to the following formula:

      $$\text{Annual } NG_{GT} = 14{,}221 \times 10^6 \text{ std ft}^3 - \frac{\text{Gallons No. 2 distillate oil used in turbines}}{6800.7 \text{ gallons per hour}} \times 974 \times 10^3$$

   c. No. 2 distillate oil: $13{,}601 \times 10^3$ gallons maximum (in the numerator of the second term of formula III.A.8.b). This maximum allowable annual No. 2 distillate oil consumption limit shall be reduced by an amount determined by the following formula:

      $$\frac{(\text{Annual } NG_{GT} - 12{,}273 \times 10^6) \times 6800.7}{974 \times 10^3}$$

      where Annual NG_{GT} is the quantity in III.A.8.b.

   (9 VAC 5-80-1180, 9 VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 11 of the NSR permit issued April 10, 2003)

9. The two duct burners (ES-3 & ES-4) together shall consume a combined total of no more than the following quantities of fuels annually, calculated as the sum of each consecutive 12 month period:
   a. Natural gas: 504×10^6 cubic feet maximum at standard conditions when used 100 percent throughout the year.

b. In the event that satisfactory opacity testing with No. 2 distillate oil is conducted on the duct burners, the maximum allowable natural gas consumption limit (NG_{DB}) for the duct burners shall be reduced as follows:

$$\text{Annual } NG_{DB} = 504 \times 10^6 \text{ std ft}^3 - \frac{\text{Gallons No. 2 distillate oil used in duct burners}}{571.4 \text{ gallons per hour}} \times 77.5 \times 10^3$$

c. No. 2 distillate oil: 571×10^3 gallons maximum (in the numerator of the second term of formula III.A.9.b).

(9 VAC 5-80-1180, 9 VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 12 of the NSR permit issued April 10, 2003)

10. The auxiliary boiler (ES-5) shall consume no more than the quantity of fuel annually, calculated as the sum of each consecutive 12 month period, as follows:

a. Natural gas: 153.6×10^6 cubic feet at standard conditions maximum when used 100 percent throughout the year.

b. The auxiliary boiler allowable annual natural gas consumption limit (NG_{AB}) shall be reduced when No. 2 distillate oil is used, according to the following formula:

$$\text{Annual } NG_{AB} = 153.6 \times 10^6 \text{ std ft}^3 - \frac{\text{Gallons No. 2 distillate oil used in boiler}}{915.0 \text{ gallons per hour}} \times 128.0 \times 10^3$$

c. No. 2 distillate oil: 366×10^3 gallons maximum (in the numerator of the second term of formula III.A.10.b).

d. The allowable annual natural gas consumption limit shall be increased by 128.0×10^3 cubic feet at standard conditions for every 974×10^3 cubic feet at standard conditions not burned in the gas turbines (ES-1 & ES-2) (because of reduced gas consumption in the gas turbines). The increase in the allowable annual natural gas consumption limit in the auxiliary boiler shall be calculated according to the following formula:

$$\text{NG Increase} = \frac{\text{Annual } NG_{GT} - \text{NG used by GT}}{974 \times 10^3} \times 128.0 \times 10^3$$

(where annual NG_{GT} is the quantity in III.A.8.b) and added to the quantity determined in Condition III.A.10.b. Any natural gas replaced by No. 2 distillate oil in the gas turbines can not be allocated to the auxiliary boiler.

e. The allowable annual auxiliary boiler fuel consumption limits shall be increased by 128.0×10^3 cubic feet of natural gas at standard conditions, or 915.0 gallons of No. 2 distillate oil, for every 6,800.7 gallons of distillate oil not burned in the gas turbines (ES-1 & ES-2) (below the maximum limit of Condition III.A.8.c) because of reduced consumption of oil in the gas turbines.

The allowable fuel consumption limit increases shall be calculated according to the following formula:

$$\text{NG Increase} = \frac{FO_{GT} \text{ - distillate oil used by GT}}{6800.7} \times 128.0 \times 10^3$$

and added to the quantity determined in Condition III.A.10.b.

OR

$$\text{Oil Increase} = \frac{FO_{GT} \text{ - distillate oil used by GT's}}{6800.7} \times 915.0$$

(where FO_{GT} is the quantity in Condition III.A.8.c.) and added to the quantity in Condition III.A.10.c.

Any oil replaced by natural gas in the gas turbines (ES-1 & ES-2) cannot be allocated to the auxiliary boiler.

(9 VAC 5-80-1180, 9 VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 13 of the NSR permit issued April 10, 2003)

11. The emergency diesel electric generator (ES-7) shall not consume more than 6,136 gallons of No. 2 distillate oil per year, calculated as the sum of each consecutive 12 month period.
(9 VAC 5-80-1180, VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 14 of the NSR permit issued April 10, 2003)

12. The average sulfur content of the natural gas to be burned in the gas turbines/HRSG duct burners (ES-1/ES-3 & ES-2/ES-4) and auxiliary boiler (ES-5) shall not exceed 0.22 grains per 100 cubic feet at standard conditions.
(9 VAC 5-80-1180, VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 15 of the NSR permit issued April 10, 2003)

13. The maximum sulfur content of the oil to be burned in the gas turbines/HRSG duct burners (ES-1/ES-3 & ES-2/ES-4), auxiliary boiler (ES-5) and emergency diesel generator (ES-7) shall not exceed 0.2 percent by weight.
(9 VAC 5-80-1180, VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 16 of the NSR permit issued April 10, 2003)

14. Virginia Electric and Power Company shall maintain adequate storage/supply of ammonia consistent with the needs and requirements of the facility.
(9 VAC 5-50-40E, VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 17 of the NSR permit issued April 10, 2003)

15. Combustion products from the operation of each gas turbine (ES-1 & ES-2), prior to treatment by selective catalytic reduction (SCR), shall not exceed the limitations specified below:

For Natural Gas Firing	lbs/hr
PM (TSP)	0.6
PM_{10}	0.6
SO_2	0.7

NO_X	42.0 ppmvd at 15 percent O_2 (1-hour average)	---
VOC		0.7
CO		28.0

For Distillate Oil Firing

PM (TSP)		28.0
PM_{10}		28.0
SO_2	38.3 ppmvd at 15 percent 0_2 (1-hour average)	226.0
NO_X	65.0 ppmvd at 15 percent 0_2 (1-hour average)	---
VOC		8.0
CO		28.0
Lead		0.04

(9 VAC 5-50-260, 9 VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 23 of the NSR permit issued April 10, 2003)

16. Emissions from the operation of each duct burner (ES-3 & ES-4) shall not exceed the limitations specified below:

For natural gas firing		lbs/hr
PM (TSP)		0.39
PM_{10}		0.39
SO_2		0.05
NO_X	8.2 ppmvd at 15 percent O_2 (1-hour average)	---
VOC		7.6
CO		15.2

For distillate oil firing (only after permit amendment and satisfactory opacity testing)

		lbs/hr
PM (TSP)		3.1
PM_{10}		3.1
SO_2	38.3 ppmvd at 15 percent O_2 (1-hour average)	16.7
NO_X	11.7 ppmvd at 15 percent O_2 (1-hour average)	--
VOC		12.0
CO		24.0
Lead		0.0013

The NO_X emissions from each stack when burning either natural gas or No. 2 oil shall not exceed 8.2 and 11.7 ppmvd at 15 percent O_2, respectively, after exhaust gas treatment by SCR.
(9 VAC 5-50-260, 9 VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 24 of the NSR permit issued April 10, 2003)

17. Emissions from the operation of the auxiliary boiler (ES-5) shall not exceed the limitations specified below:

For Natural Gas Firing	lbs/mmBtu	lbs/hr
PM (TSP)	0.008	1.06
PM_{10}	4.8×10^{-3} (HHV) (see Note 1)	0.64

SO_2	6.06×10^{-4} (HHV)	0.08
CO	---	9.6
VOC	---	1.06
NO_X	0.10 (HHV) (see Note 2)	13.3
<u>For No. 2 Distillate Oil Firing</u>		
PM (TSP)	0.03	3.9
PM_{10}	6.0×10^{-3} (HHV)	0.8
SO_2	0.21 (HHV)	26.5
CO	---	10.0 (see Note 3)
VOC	---	1.03
NO_X	0.12 (HHV) (see Note 2)	15.4
Lead	---	2.1×10^{-3}

Note 1: HHV = higher heating value.
Note 2: Compliance shall be determined as stated in Condition III.B.7.
Note 3: Compliance shall be determined on a consecutive 12-month average basis.
(9 VAC 5-50-410, 9 VAC 5-80-1180, 9 VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 25 of the NSR permit issued April 10, 2003)

18. Toxic pollutant emissions from the operation of the gas turbines/HRSG duct burners (ES-1/ES-3 & ES-2/ES-4) and auxiliary boiler (ES-5) shall be limited by the fuel consumption limits in Conditions III.A.8, III.A.9, III.A.10, and III.A.11.
(9 VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 27 of the NSR permit issued April 10, 2003)

19. Visible emissions from each gas turbine/HRSG duct burner stack (EP-1 & EP-2) and the auxiliary boiler stack (EP-5) shall not exceed 20 percent opacity, except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-50-260, 9 VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 28 of the NSR permit issued April 10, 2003)

B. Monitoring and Recordkeeping

1. Virginia Electric and Power Company shall retain records of all emission data and operating parameters required by the terms of this permit, to include process throughputs, and shall include recordkeeping and reporting requirements of applicable NSPS and 9 VAC 5-50-50 of State Regulations.
(9 VAC 5-50-50, 9 VAC 5-80-110, 9 VAC 5-80-490, and Condition 29 of the NSR permit issued April 10, 2003)

2. Virginia Electric and Power Company shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water injected to fuel being fired in each turbine (ES-1 & ES-2). This system shall be accurate to within ± 5.0 percent and shall be approved by the Administrator.
(40 CFR 60.334(a), 9 VAC 5-50-410, 9 VAC 5-80-110, and 9 VAC 5-80-490)

3. Virginia Electric and Power Company shall monitor the sulfur content of the No. 2 distillate oil being fired in the combustion turbines (ES-1 & ES-2) in accordance with 40 CFR Section 60.334(b). Records of all sample analysis reports indicating sulfur content of the distillate oil shall be maintained. Sampling frequency shall be as specified in 40 CFR Section 60.335(b) of NSPS Subpart GG.
(9 VAC 5-50-50, 9 VAC 5-80-110, 9 VAC 5-80-490, and Conditions 16 and 29 of the NSR permit issued April 10, 2003)

4. Records of all sample analysis reports indicating sulfur content of the natural gas shall be maintained. An analysis of the sulfur content of the natural gas shall be conducted twice per year during the first and third quarter of each calendar year. If any sulfur analysis indicates noncompliance with 40 CFR Section 60.333, the owner or operator shall notify the US EPA Regional Office Air Division of such excess emissions and the custom fuel monitoring schedule shall be conducted weekly during the interim period when this custom schedule is being re-examined. A change in the fuel supply shall also cause a review of the custom fuel monitoring schedule. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-50-50, 9 VAC 5-80-110, 9 VAC 5-80-490, and Conditions 15 and 29 of the NSR permit issued April 10, 2003)

5. Virginia Electric and Power Company shall install and operate continuous monitoring systems to monitor and record:

   a. Opacity of the auxiliary boiler stack (EP-5).

   b. Nitrogen oxides concentration at each gas turbine/HRSG duct burner (EP-1 & EP-2) and auxiliary boiler stack (EP-5).

   c. Oxygen or carbon dioxide concentration at each gas turbine/HRSG duct burner (EP-1 & EP-2) and auxiliary boiler stack (EP-5).

   All continuous monitoring systems shall comply with the requirements of 40 CFR, Part 60, Section 60.13.
   (9 VAC 5-50-40, VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 18 of the NSR permit issued April 10, 2003)

6. For the opacity monitor on the auxiliary boiler (ES-5) and for all other continuous monitors required by this permit, the continuous monitoring data may, at the discretion of the Board, be used as evidence of violation of the emission standards. Further, these monitors are subject to such data capture requirements and/or quality assurance requirements as may be deemed appropriate by the Board.
(9 VAC 5-50-40, 9 VAC 5-80-110, 9 VAC 5-80-490, and Condition 22 of the NSR permit issued April 10, 2003)

7. The continuous monitoring data generated by the NO_X monitor on the auxiliary boiler (ES-5) shall be used to determine compliance with the lbs/mmBtu emissions

standard on a 30-day rolling average basis. All of the quality assurance requirements of Part 60, Appendix F shall apply to this monitor.
(9 VAC 5-50-280, 9 VAC 5-50-410, Subpart GG, Appendix F, 9 VAC 5-80-110, 9 VAC 5-80-490, and Condition 20 of the NSR permit issued April 10, 2003)

8. Virginia Electric and Power Company shall submit excess NO_X and opacity emission reports to the Director, Piedmont Regional Office within 30 days after the end of each calendar quarter for which there are excess emissions as described in 40 CFR 60.49b (h) and (i). Details of the quarterly reports are to be arranged with the Director, Piedmont Regional Office. If there are no excess opacity or NO_X emissions during the calendar quarter, the permittee shall submit a report semiannually stating that no excess emission occurred during the semiannual reporting period. The initial quarterly report shall be submitted to the Director, Piedmont Regional Office, postmarked by the 30th day of the end of the previous quarter, unless no excess emissions occur during that quarter. Each subsequent quarterly or semiannual report shall be postmarked by the 30th day following the end of the reporting period. All quarterly and semiannual monitoring reports shall conform to the Continuous Emission Monitoring System Report Format enclosed with the NSR permit issued April 10, 2003.
(9 VAC 5-50-50 C, 9 VAC 5-80-110, 9 VAC 5-80-490, and Condition 21 of the NSR permit issued April 10, 2003)

9. Virginia Electric and Power Company shall install and operate ammonia flow meter devices to measure and record the injection rate of ammonia to the selective catalytic reduction systems (CD-3 & CD-4). These devices shall be maintained and calibrated according to the manufacturer's specifications.
(9 VAC 5-50-40, VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 19 of the NSR permit issued April 10, 2003)

C. Testing

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Regulated Pollutant	Reference Method
VOC	EPA Methods 18, 25, 25a
NO_X	EPA Method 7
SO_2	EPA Method 6
CO	EPA Method 10
PM/PM_{10}	EPA Methods 5, 202 / 17, 201A
Visible Emissions	EPA Method 9

The Department and EPA have the authority to require testing not included in this permit, if necessary to determine compliance with an emission limit or standard. Alternative test methods may be used upon written approval from the Director. (9 VAC 5-80-110 and 9 VAC 5-80-490)

IV. Distillate Fuel Storage (Unit Ref. No. ES-6)

A. Limitations

The 50,000 gallon No. 2 distillate oil storage tank (ES-6) is subject to 40 CFR, Part 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels. Virginia Electric and Power Company shall comply with all applicable recordkeeping and reporting requirements of 40 CFR 60, Subpart Kb.
(9 VAC 5-50-410, Subpart Kb, 9 VAC 5-80-110, 9 VAC 5-80-490,and Condition 5 of the NSR permit issued April 10, 2003)

B. Monitoring and Recordkeeping

The permittee shall keep readily accessible records showing the dimensions of the 50,000 gallon distillate oil storage tank (ES-6) and an analysis showing the capacity of the storage tank. These records shall be kept for the life of the source.
(9 VAC 5-50-410, Subpart Kb, 9 VAC 5-80-110, and 9 VAC 5-80-490)

V. Facility-Wide Conditions

A. Limitations

1. Total annual criteria pollutant emissions from the entire facility shall not exceed the quantities specified below:

PM (TSP)	42.7 tons per year
PM_{10}	42.7 tons per year
NO_X	244.3 tons per year
CO	247.1 tons per year
SO_2	220.3 tons per year
VOC	58.5 tons per year

For purposes of demonstrating compliance with the NO_X, CO, and SO_2 emission limits listed above, annual emissions shall be calculated as follows:

$$NO_X = \frac{1 - 0.805}{2 \times 10^9} \times (NG_{GT} \times 156 + NG_{DB} \times 103.2) + \frac{NG_{AB} \times 103.9}{2 \times 10^9}$$

$$+ \frac{1 - 0.805}{2 \times 10^6} \times (FO_{GT} \times 32.7 + FO_{DB} \times 14) + \frac{FO_{AB} \times 16.8}{2 \times 10^6}$$

$$SO_2 = \frac{1}{2 \times 10^9} \times [(NG_{GT} \times 0.72) + (NG_{DB} \times 0.65) + NG_{AB} \times 0.6]$$

$$+ \frac{1}{2 \times 10^6} \times (FO_{GT} \times 29.7 + FO_{DB} \times 29.2 + FO_{AB} \times 29.0)$$

$$CO = \frac{1}{2 \times 10^9} \times (NG_{GT} \times 26.3 + NG_{DB} \times 196 + NG_{AB} \times 75)$$

$$+ \frac{1}{2 \times 10^6} \times (FO_{GT} \times 3.82 + FO_{DB} \times 42 + FO_{AB} \times 10.9)$$

Where: NG_{GT}, NG_{DB} and NG_{AB} are the 12-month rolling totals of natural gas consumption in the gas turbines (ES-1 & ES-2), duct burners (ES-3 & ES-4) and auxiliary boiler (ES-5) respectively.

FO_{GT}, FO_{DB} and FO_{AB} are the 12-month rolling totals of fuel oil consumption in the gas turbines (ES-1 & ES-2), duct burners (ES-3 & ES-4) and auxiliary boiler (ES-5) respectively.

Emissions recorded and calculated by continuous emissions monitors meeting the requirements of 40 CFR 60 may be substituted for the nitrogen oxide equation.
(9 VAC 5-80-1180, 9 VAC 5-80-110 B, 9 VAC 5-80-490 B, and Condition 26 of the NSR permit issued April 10, 2003)

B. Monitoring and Recordkeeping

Virginia Electric and Power Company shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-50-50, 9 VAC 5-80-250, 9 VAC 5-80-650, and Condition 29 of the NSR permit issued April 10, 2003)

VI. Phase II Acid Rain Conditions

A. Emissions from Units 1 and 2 (ES-1 & ES-2) at the Bellemeade Power Station may not exceed any allowances the respective unit holds under its Title IV acid rain permit. The Phase II Acid Rain Permit for the Bellemeade Power Station, issued pursuant to 9 VAC 5-80-360, et seq., is incorporated by reference into this permit. A copy of the acid rain permit is attached.
(40 CFR Part 70, section 70.6(a)(4))

B. Where an applicable requirement of the Clean Air Act, or of this permit, is more stringent than an applicable requirement from state or federal regulations promulgated

under Title IV of the Clean Air Act, both provisions appear in this Permit and both are enforceable by the Administrator of the U.S. Environmental Protection Agency.
(40 CFR Part 70, section 70.6(a)(1)(ii))

C. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to Title IV of the federal Clean Air Act or 9 VAC 5-80-360, et seq., provided that such increases do not require a permit revision under any other applicable requirement.
(40 CFR Part 70, section 70.6(a)(4)(i))

D. This facility may hold any number of allowances authorized by its acid rain permit. However, the source may not use these allowances as a defense to a non-compliance with any other applicable requirement.
(40 CFR Part 70, section 70.6(a)(4)(ii))

E. Any allowance authorized by this facility's acid rain permit shall be accounted for according to procedures established under 9 VAC 5-80-360, et seq., or under federal regulations pursuant to Title IV of the Clean Air Act.
(40 CFR Part 70, section 70.6(a)(4)(iii))

F. Nothing in this permit shall alter or affect the applicable requirements of the acid rain program pursuant to Title IV of the Clean Air Act.
(40 CFR Part 70, section 70.6(f)(3)(iii))

VII. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Pollutant Emitted (9 VAC 5-80-720 B.)	Rated Capacity (9 VAC 5-80-720 C.)
IS-2	Emergency Fuel Oil Tank (Diesel)	VOC	350 gal
IS-4	Turbine Lube Oil System (Combustion Turbine Unit 1)	VOC	4000 gal
IS-5	Turbine Lube Oil System (Combustion Turbine Unit 2)	VOC	4000 gal
IS-6	Steam Turbine Lube Oil System & Hydraulic Oil System	VOC	250 gal & 4000 gal
IS-7	Oily Water Collection Sump	VOC	7000 gal
IS-8	Oily Water Separation Tank	VOC	275 gal

Emission Unit No.	Emission Unit Description	Pollutant Emitted (9 VAC 5-80-720 B.)	Rated Capacity (9 VAC 5-80-720 C.)
IS-9	Kerosene Storage Tanks (Model 358)	VOC	100 & 275 gal
IS-10	Maintenance Shop Degreaser	VOC	20 gal
The regulatory citation for each of the insignificant activities is 9 VAC 5-80-720B - Insignificant due to emission levels.			

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

VIII. Permit Shield and Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
-	-	-

Nothing in this permit shield shall alter the provisions of § 303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to § 114 of the federal Clean Air Act, (ii) the Board pursuant to § 10.1-1314 or § 10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to § 10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140 and 9 VAC 5-80-500)

IX. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N and 9 VAC 5-80-490 N)

B. Permit Expiration

This permit has a fixed term of five years and shall expire five years from the effective date of the permit. Unless a timely and complete renewal application, consistent with 9 VAC 5-80-80 and 9 VAC 5-80-430 has been submitted to the Department by the owner, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months, but no earlier than eighteen months, prior to the date of permit expiration.

2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Articles 1 and 3, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150 and 9 VAC 5-80-510.

3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 and 9 VAC 5-80-430 for a renewal permit, except in compliance with a permit issued under 9 VAC 5 Chapter 80, Part II, Articles 1 and 3.

4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 and 9 VAC 5-80-430 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140 and 9 VAC 5-80-500, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

5. The protection under subsections F 1 and F 5 (ii) of sections 9 VAC 5-80-80 and 9 VAC 5-80-430 shall cease to apply if, subsequent to the completeness determination made pursuant to sections 9 VAC 5-80-80 D and 9 VAC 5-80-430 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-430 B, C and F, 9 VAC 5-80-110, 9 VAC 5-80-490 D, 9 VAC 5-80-170 B, and 9 VAC 5-80-530 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

   a. The date, place as defined in the permit, and time of sampling or measurements.

   b. The date(s) analyses were performed.

   c. The company or entity that performed the analyses.

d. The analytical techniques or methods used.

e. The results of such analyses.

f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F and 9 VAC 5-80-490 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9 VAC 5-80-110 F and 9 VAC 5-80-490 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G and 9 VAC 5-80-430 G, and shall include:

   a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.

   b. All deviations from permit requirements. For purposes of this permit, "deviations" include, but are not limited to:

      i. Exceedance of emissions limitations or operational restrictions;

      ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

      iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

   If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”

(9 VAC 5-80-110 F and 9 VAC 5-80-490 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G and 9 VAC 5-80-430 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.

2. The identification of each term or condition of the permit that is the basis of the certification.

3. The compliance status.

4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.

5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.

6. Such other facts as the permit may require to determine the compliance status of the source.

   One copy of the annual compliance certification shall be sent to EPA at the following address:

   Clean Air Act Title V Compliance Certification (3AP00)
   U.S. Environmental Protection Agency, Region III
   1650 Arch Street
   Philadelphia, PA 19103-2029

(9 VAC 5-80-110 K.5 and 9 VAC 5-80-490 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Piedmont Regional Office, within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3 of this permit.
(9 VAC 5-80-110 F.2, 9 VAC 5-80-490 F.2, 9 VAC 5-80-250, and 9 VAC 5-80-650)

F. Failure/Malfunction Reporting

1. In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours, notify the Director, Piedmont Regional Office by facsimile transmission,

telephone or telegraph of such failure or malfunction and shall within two weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C, and 9 VAC 5-50-50 C, are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Piedmont Regional Office.
(9 VAC 5-20-180 C)

2. Each owner required to install a continuous monitoring system subject to 9 VAC 5-40-41 or 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in the applicable emission standard) to the Board for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter and shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9 VAC 5-40-41 B 6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and

   d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

   (9 VAC 5-20-180 C, 9 VAC 5-40-50, and 9 VAC 5-50-50)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1 and 9 VAC 5-80-490 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds: for enforcement action; for permit

termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
(9 VAC 5-80-110 G.2 and 9 VAC 5-80-490 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3 and 9 VAC 5-80-490 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000, and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-190, 9 VAC 5-80-550, 9 VAC 5-80-260, and 9 VAC 5-80-660)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5 and 9 VAC 5-80-490 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6 and 9 VAC 5-80-490 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G and 9 VAC 5-80-430 G.
(9 VAC 5-80-110 K.1 and 9 VAC 5-80-490 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-305 and/or 9 VAC 5-80-360 through 9 VAC 5-80-700 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The

actual emissions covered by the permit program fees for the proceeding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-490 H)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited, to the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;

4. Open equipment for conveying or transporting material likely to become airborne and create objectionable air pollution, shall be covered (or treated in an equally effective manner) at all times when in motion; and

5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-50-90

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9 VAC 9 VAC 5-50-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 and 9 VAC 5-80-500, shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Articles 1 and 3.
(9 VAC 5-80-110 J and 9 VAC 5-80-490 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2 and 9 VAC 5-80-490 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F and 9 VAC 5-80-430 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D and 9 VAC 5-80-490 D.

(9 VAC 5-80-110 L and 9 VAC 5-80-490 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-150 E and 9 VAC 5-80-510 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.

2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200 and 9 VAC 5-80-560.

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200 and 9 VAC 5-80-560.

(9 VAC 5-80-160 and 9 VAC 5-80-520)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the provisions of paragraph 2 of this condition are met.

2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

   a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

   b. The permitted facility was at the time being properly operated.

c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b and 9 VAC 5-80-490 F.2.b, to promptly report deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.

4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.

(9 VAC 5-80-250 and 9 VAC 5-80-650)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto, or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80, Part II, Articles 1 and 3. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any of the grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-190 C, 9 VAC 5-80-550 C, 9 VAC 5-80-260, and 9 VAC 5-80-660)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E and 9 VAC 5-80-430 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substance subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A - F)

Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9 VAC 5-60-70, 9 VAC 5-80-110 A.1, and 9 VAC 5-80-490.A.1)

Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

AA. Changes to Permits for Emissions Trading

No permit revision shall be required, under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-110 I and 9 VAC 5-80-490 I)

BB. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110 and 9 VAC 5-80-490, except subsection N, shall be included to determine compliance.

2. The permit shield described in 9 VAC 5-80-140 and 9 VAC 5-80-500 shall extend to all terms and conditions that allow such increases and decreases in emissions.

3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300 and 9 VAC 5-80-360 through 9 VAC 5-80-700.

(9 VAC 5-80-110 I and 9 VAC 5-80-490 I)

X. NO_X Budget Trading Permit Requirements

A review of the air emission units included in this permit approval has determined that the equipment listed in the following table meets the definition of a NO_X Budget Unit and is subject to the NO_X Budget emission limitations under 9 VAC 5-140-40, or for opt-in sources 9 VAC 5-140-800. As required by 9 VAC 5-140-200 A for each NO_X Budget source required to have a federally enforceable permit, such permit will include the NO_X Budget Trading permit to be administered by the permitting authority. This section represents the NO_X Budget Trading permit.

The NO_X Budget Trading permit will be administrated by the DEQ under the authority of 9 VAC 5 Chapter 80, Part II, Articles 1 and 3 (9 VAC 5-80-50 et seq. and 9 VAC 5-80-360 et seq.), and 9 VAC 5 Chapter 140, Part I (9 VAC 5-140-10 et seq.).

A. General Conditions

1. The following air emission units have been determined to meet the applicability requirements as provided in 9 VAC 5-140-40 A.1 and A.2. Units that do not meet this definition, are not defined as 25-Ton Exemption Units and are not permanently shutdown can be included in the NO_X Budget Trading program as "opt-in" air emission sources.
(9 VAC 5-140-40 A)

Table X – 1
Facility NO_X Budget Units

Facility Unit ID	NATS Account ID	Unit Name and description	Maximum Heat Capacity (mmBtu/hr)	Maximum Generation Capacity (megawatts)
Unit 1	050966-000001	ASEA Brown Boveri Type 11N Combustion Turbine and John Zink Co. 80 mmBtu/hr Duct Burners	1163.5 and 80	Total Facility rated at 240 MW, two Turbine Generators rated at 82 MW each, and single Steam Turbine rated at 76 MW.
Unit 2	050966-000002	ASEA Brown Boveri Type 11N Combustion Turbine and John Zink Co. 80 mmBtu/hr Duct Burners	1163.5 and 80	

2. This NO_X Budget Trading permit will become effective on May 31, 2004.
(9 VAC 5-140-240.1)

B. Standard Requirements

1. Monitoring requirements.

a. The owners and operators and, to the extent applicable, the NO_X authorized account representative of each NO_X Budget source and each NO_X Budget unit at the source shall comply with the monitoring requirements of Part I, Article 8 (9 VAC 5-140-700 et seq.).
(9 VAC 5-140-60 B.1)

b. The emissions measurements recorded and reported in accordance with (9 VAC 5-140-700 et seq.) (Subpart H of 40 CFR Part 97) shall be used to determine compliance by the unit with the NO_X Budget emissions limitation under paragraphs X.B.2.a through X.B.2.h.
(9 VAC 5-140-60 B.2)

2. Nitrogen oxides requirements.

a. The owners and operators of each NO_X Budget source and each NO_X Budget unit at the source shall hold NO_X allowances available for compliance deductions under 9 VAC 5-140-540 A, B, E, or F, as of the NO_X allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NO_X emissions for the control period from the unit, as determined in accordance with Part I, Article 8 (9 VAC 5-140-700 et seq.), plus any amount necessary to account for actual utilization under 9 VAC 5-140-420 E for the control period or to account for excess emissions for a prior control period under 9 VAC 5-140-540 D or to account for withdrawal from the NO_X Budget Trading Program, or a change in regulatory status, of a NO_X Budget opt-in unit under 9 VAC 5-140-860 or 9 VAC 5-140-870.
(9 VAC 5-140-60 C.1)

b. Each ton of nitrogen oxides emitted in excess of the NO_X Budget emissions limitation shall constitute a separate violation of 9 VAC 5 Chapter 140, Part I, the Clean Air Act, and applicable Virginia Air Pollution Control law.
(9 VAC 5-140-60 C.2)

c. A NO_X Budget unit shall be subject to the requirements under 9 VAC 5-140-60 C.1 starting on the later of May 31, 2004, or the date on which the unit commences operation.
(9 VAC 5-140-60 C.3)

d. NO_X allowances shall be held in, deducted from, or transferred among NO_X Allowance Tracking System accounts in accordance with Part I, Article 5 (9 VAC

5-140-400 et seq.), Article 6 (9 VAC 5-140-500 et seq.), Article 7 (9 VAC 5-140-600 et seq.), and Article 9 (9 VAC 5-140-800 et seq.).
(9 VAC 5-140-60 C.4)

e. A NO_X allowance shall not be deducted, in order to comply with the requirements under 9 VAC 5-140-60 C.1 for a control period in a year prior to the year for which the NO_X allowance was allocated.
(9 VAC 5-140-60 C.5)

f. A NO_X allowance allocated by the permitting authority or the administrator under the NO_X Budget Trading Program is a limited authorization to emit one ton of nitrogen oxides in accordance with the NO_X Budget Trading Program. No provision of the NO_X Budget Trading Program, the NO_X Budget permit application, the NO_X Budget permit, or an exemption under 9 VAC 5-140-50 and no provision of law shall be construed to limit the authority of the United States or the State to terminate or limit such authorization.
(9 VAC 5-140-60 C.6)

g. A NO_X allowance allocated by the permitting authority or the administrator under the NO_X Budget Trading Program does not constitute a property right.
(9 VAC 5-140-60 C.7)

h. Upon recordation by the administrator under Part I, Article 6 (9 VAC 5-140-500 et seq.), Article 7 (9 VAC 5-140-600 et seq.), or Article 9 (9 VAC 5-140-800 et seq.), every allocation, transfer, or deduction of a NO_X allowance to or from a NO_X Budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NO_X Budget permit of the NO_X Budget unit by operation of law without any further review.
(9 VAC 5-140-60 C.8)

3. Excess emissions requirements.

The owners and operators of a NO_X Budget unit that has excess emissions in any control period shall:

a. Surrender the NO_X allowances required for deduction under 9 VAC 5-140-540 D 1; and

b. Pay any fine, penalty, or assessment or comply with any other remedy imposed under 9 VAC 5-140-540 D 3.

C. Recordkeeping and Reporting Requirements.

The following requirements concerning recordkeeping and reporting shall apply:

1. Unless otherwise provided, the owners and operators of the NO_X Budget source and each NO_X Budget unit at the source shall keep on site at the source each of the

following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the permitting authority or the administrator.
(9 VAC 5-140-60 E.1)

a. The account certificate of representation for the NO_X authorized account representative for the source and each NO_X Budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 9 VAC 5-140-130; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new account certificate of representation changing the NO_X authorized account representative.
(9 VAC 5-140-60 E.1)

b. All emissions monitoring information, in accordance with Part I, Article 8 (9 VAC 5-140-700 et seq.), provided that to the extent that Part I, Article 8 (9 VAC 5-140-700 et seq.) provides for a three-year period for recordkeeping, the three-year period shall apply.
(9 VAC 5-140-60 E.1)

c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_X Budget Trading Program.
(9 VAC 5-140-60 E.1)

d. Copies of all documents used to complete a NO_X Budget permit application and any other submission under the NO_X Budget Trading Program or to demonstrate compliance with the requirements of the NO_X Budget Trading Program.
(9 VAC 5-140-60 E.1)

2. The NO_X authorized account representative of a NO_X Budget source and each NO_X Budget unit at the source shall submit the reports and compliance certifications required under the NO_X Budget Trading Program, including those under Part I, Article 4 (9 VAC 5-140-300 et seq.), Article 8 (9 VAC 5-140-700 et seq.), or Article 9 (9 VAC 5-140-800 et seq.).
(9 VAC 5-140-60 E.2)

D. Certification

The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports will be provided at the appropriate locations.
(9 VAC 5-50-30)

E. Liability

1. Any person who knowingly violates any requirement or prohibition of the NO_X Budget Trading Program, a NO_X Budget permit, or an exemption under 9 VAC 5-140-50 shall be subject to enforcement pursuant to applicable State or Federal law.
(9 VAC 5-140-60 F.1)

2. Any person who knowingly makes a false material statement in any record, submission, or report under the NO_X Budget Trading Program shall be subject to criminal enforcement pursuant to the applicable State or Federal law.
(9 VAC 5-140-60 F.2)

3. No permit revision shall excuse any violation of the requirements of the NO_X Budget Trading Program that occurs prior to the date that the revision takes effect.
(9 VAC 5-140-60 F.3)

4. Each NO_X Budget source and each NO_X Budget unit shall meet the requirements of the NO_X Budget Trading Program.
(9 VAC 5-140-60 F.4)

5. Any provision of the NO_X Budget Trading Program that applies to a NO_X Budget source or the NO_X authorized account representative of a NO_X Budget source shall also apply to the owners and operators of such source and of the NO_X Budget units at the source.
(9 VAC 5-140-60 F.5)

6. Any provision of the NO_X Budget Trading Program that applies to a NO_X Budget unit or the NO_X authorized account representative of a NO_X budget unit shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under Article 8 (9 VAC 5-140-700 et seq.), the owners and operators and the NO_X authorized account representative of one NO_X Budget unit shall not be liable for any violation by any other NO_X Budget unit of which they are not owners or operators or the NO_X authorized account representative and that is located at a source of which they are not owners or operators or the NO_X authorized account representative.
(9 VAC 5-140-100 F.6)

F. Effect on Other Authorities.

No provision of the NO_X Budget Trading Program, a NO_X Budget permit application, a NO_X Budget permit, or an exemption under 9 VAC 5-140-50 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO_X authorized account representative of a NO_X Budget source or NO_X Budget unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, the Clean Air Act.
(9 VAC 5-140-60 G)

PHASE II ACID RAIN PERMIT

This permit supersedes your Phase II Acid Rain permit approved on December 9, 1997.

Issued to:	Bellemeade Power Station
Operated by:	Dominion Generation
Location:	City of Richmond
Registration No.:	50988
County Plant ID No.:	760-0389
ORIS code:	50966
Effective:	January 1, 2003
Expires:	December 31, 2007

Acid Rain Permit Contents

1. Statement of Basis.

2. SO_2 allowances allocated under this permit and NO_x requirements for each affected unit.

3. Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process and any additional requirements or conditions.

4. The permit application submitted for this source (3 pages).

Permit Approval

Approved on: October 17, 2002

_____

Robert G. Burnley
Director

Permit consists of a total of 6 pages, including the attached permit application.

1. Statement of Basis. (9 VAC 5-80-490 B.2)

Statutory and Regulatory Authorities: In accordance with the Air Pollution Control Law of Virginia §10.1-1308 and §10.1-1322, the Environmental Protection Agency (EPA) Final Full Approval of the Operating Permits Program (Titles IV and V) published in the Federal Register December 4, 2001, Volume 66, Number 233, Rules and Regulations, Pages 62961-62967 and effective November 30, 2001, and Title 40, the Code of Federal Regulations §§72.1 through 76.16, the Commonwealth of Virginia Department of Environmental Quality issues this permit pursuant to 9 VAC 5 Chapter 80, Article 3 of the Virginia Regulations for the Control and Abatement of Air Pollution (Acid Rain Operating Permits).

2. SO_2 Allowance Allocations and NO_x Requirements for affected units.
(9 VAC 5-80-490 A.4)

		2003	2004	2005	2006	2007
Unit 1	SO_2 allowances, allocated by U. S. EPA. (tons)	None. (Notes 1 and 2)	None. (Notes 1 and 2)	None. (Notes 1 and 2)	None. (Notes 1 and 2)	None. (Notes 1 and 2)
Unit 2	SO_2 allowances, allocated by U. S. EPA. (tons)	None. (Notes 1 and 2)	None. (Notes 1 and 2)	None. (Notes 1 and 2)	None. (Notes 1 and 2)	None. (Notes 1 and 2)

3. Additional Requirements, Notes, Comments, and Justifications.

A. Additional Requirements:

(1) Dominion Generation shall submit a complete permit application that includes all of the information required under 40 CFR §§72.21 and 72.31 at least 6 months, but no earlier than 18 months, prior to the date of expiration of the existing Phase II Acid Rain permit. EPA forms shall be used.
(9 VAC 5-80-430 C.5)

B. Notes.

(1) SO_2 allowances may be acquired from other sources in addition to those allocated by U.S. EPA. No revision to this permit is necessary in order for the owners and operators of this unit to hold additional allowances recorded in accordance with 40 CFR Part 73. The owners and operators of

this unit remain obligated to hold sufficient allowances to account for SO_2 emissions from this unit in accordance with 40 CFR 72.9(c)(1).
(9 VAC 5-80-420 C.1 and H.1 and 9 VAC 5-80-490 O)

(2) This unit was not eligible for SO_2 allowance allocation by U.S. EPA under Section 405 of the Clean Air Act and the Acid Rain Program, so none were assigned in 40 CFR Part 73, Table 2.
(9 VAC 5-80-420 C.6)

C. Comments:

(1) None.

D. Justifications:

(1) Units 1 and 2 are a gas-fired or oil-fired unit and are not subject to NO_x limitations under 40 CFR Part 76.
(9 VAC 5-80-420 D)

4. Phase II Acid Rain Permit Application. The attached permit application (3 pages) is incorporated into the Phase II Acid Rain permit by reference. The owners and operators of the source shall comply with the standard requirements and special provisions set forth in the application.
(9 VAC 5-80-440 and 9 VAC 5-80-490 A.4.a and c, B, C, E, F, M, O and P)